



Report No: MAT:WAI22S-00654

Issue No: 1

Material Test Report

Client:
 Manukau Quarries LP
 P O Box 202230
 Takanini

 Auckland 2246
 NZ
Project: Laboratory Testing

ACCREDITED

 The tests reported herein (unless otherwise indicated) have been performed in accordance with the laboratory's scope of accreditation. Samples are tested as received, in natural condition, unless stated otherwise in the comments. This report may only be reproduced in full.

 Approved Signatory: Charlotte Harrison
 (Laboratory Technician)
 IANZ Accreditation No:561
 Date of Issue: 4/03/2022
 The results in this report relate only to the items / samples that were tested

Sample Details
Sample ID: WAI22S-00654
Client Sample ID: Manarc 40 MR9
Material: AP 40
Sample Source: Miscellaneous Aggregate
Site/Sampled From: Manukau Quarries Stockpile
Date Sampled: 23/02/2022
Specification: Clevedon - Manarc 40 MR 9
Sampled By: See report comments
Sampling Method: As Received - Not Accredited
Date Tested: 02/03/2022
Technician: Renee McKay
Sampling Endorsed?: No

Particle Size Distribution
Method: NZS 4407:2015 Test 3.8.1

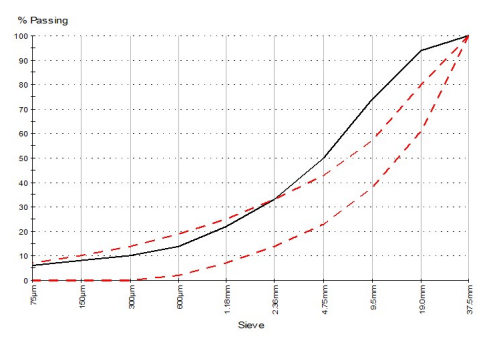
Tested By: Ryan Parry
Note: ^a Obtained by difference.

Sieve Size	% Passing	Limits
37.5mm	100	100 – 100
19.0mm	94	61 – 80
9.5mm	74	38 – 57
4.75mm	50	23 – 43
2.36mm	33	14 – 33
1.18mm	22	7 – 25
600µm	14	2 – 19
300µm	10	0 – 14
150µm	8	0 – 10
75µm	6 ^a	0 – 7

Other Test Results

Description	Method	Result	Limits
Moisture Content (%)	NZS 4407:2015 Test 3.1	3.6	
Sand Equivalent	NZS 4407:2015 Test 3.6	38.0	≥25
Shaking Method		Mechanical	
Preparation Method		Brushed	
Plasticity Index	NZS 4407:2015 3.4	12	
Plastic Limit	NZS 4407:2015 3.3	19	
Cone Penetration Limit	NZS 4407:2015 3.2	31	
Sample History		Natural State	
Test performed on		Fraction passing 425µm sieve	

Chart



Comments
 Sampled By: Bruce Bowie